

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method comprising:
generating a message digests on a client connected with a network, wherein ~~said~~
the message digests uniquely identify contents of files stored on the client;
synchronizing contents of ~~said the~~ client with a repository connected with the
network based on contents of the message digests on the client and
corresponding entries in a database of message digests stored on the
repository; ~~and~~
verifying that the contents of the repository match the contents of the client;
copying to the repository those contents of the client that did not match the
contents of the repository.
2. (Currently Amended) The method of claim 1, further comprising storing the
message digests on the client ~~after generating the message digests.~~
3. (Currently Amended) The method of claim 2, further comprising generating new
message digests for ~~all the~~ files on the client to be cached on the repository prior
to data synchronization.
4. (Currently Amended) The method of claim 1, wherein ~~said the~~ files stored on the
client comprise a subset of ~~all the~~ files stored on the client.
5. (Cancelled)

6. (Currently Amended) The method of claim 1, wherein ~~said~~the generating of the message digests comprises generating a cryptographic hash for each file to be synchronized.
7. (Currently Amended) The method of claim 6, wherein ~~said~~the cryptographic hash comprises 128 to 160 bits.
8. (Currently Amended) The method of claim 1, wherein ~~said~~the synchronizing of the contents of ~~said~~the client with a repository comprises:
 - generating a first message digest for a file stored on the client;
 - reading a second message digest from the database of message digests from the repository corresponding to the first message digest;
 - comparing the first message digest to the second message digest;
 - determining whether contents of the client match contents of the repository based on ~~said~~the comparing the first message digest to the second message digest;
 - copying files from the client to the repository if the files are not found on the repository or do not match the files found on the repository; and
 - updating the database of message digests on the repository by copying the message digest from the client to the database on the repository.

9. (Currently Amended) The method of claim 1, wherein ~~said the~~ verifying that the contents of the repository match the contents of the client comprises:
generating a first cryptographic hash from a list of message digests for all files on the client to be cached on the repository;
generating a second cryptographic hash from the contents of the database of message digests from the repository;
comparing the first and second cryptographic hash; and
repeating client and repository synchronization if the first and second cryptographic hashes do not match.
10. (Currently Amended) A system comprising:
a repository server connected with a network, the repository server to function as a data repository on behalf of a client; and
the client connected with ~~said the~~ repository server via the network, wherein ~~said the client to~~
~~generates-generate~~ a plurality of message digests that each uniquely identify the content of a corresponding file stored on the client,
~~synchronizes-synchronize~~ contents of ~~said the~~ client with files stored in the repository server based on contents of the message digests on the client and a database of message digests stored on the repository,
and
~~verifies-verify~~ whether the contents of the repository match the contents of the client;
copy to the repository those contents of the client that did not match the contents of the repository.

11. (Currently Amended) The system of claim 10, wherein ~~said~~ the generating of the a plurality of message digests comprises performing a cryptographic hash for each file to be synchronized.
12. (Currently Amended) The system of claim 11, wherein ~~said~~ the cryptographic hash comprises 128 to 160 bits.
13. (Currently Amended) The system of claim 10, wherein ~~said~~ the client is further to:
reads-read a first message digest generated on the client;
reads-read a second message digest from the database of message digests from the repository corresponding to the first message digest;
compares-compare the first message digest to the second message digest;
determines-determine whether contents of the client match contents of the repository based on said comparing the first message digest to the second message digest;
copies-copy files from the client to the repository if the files are not found on the repository or do not match the files found on the repository; and
updates-update the database of message digests on the repository by copying the message digest from the client to the database on the repository.
14. (Currently Amended) The system of claim 10, wherein ~~said~~ the client is further to:
generates-generate a first cryptographic hash from the message digest on the client;
generates-generate a second cryptographic hash from the database of message digests from the repository;

~~compares~~compare the first and second cryptographic hash; and
~~repeats~~repeat client and repository synchronization if the first and second
cryptographic hashes do not match.

15. -19. (Cancelled)

20. (Currently Amended) A machine-readable medium having stored thereon data representing ~~sequences~~sets of instructions, ~~said sequences of instructions~~ which, when executed by a ~~processor~~machine, cause ~~said the processor machine~~ to: generate message digests on a client connected with a network wherein ~~said the~~ message digests uniquely identify contents of files stored on the client; synchronize contents of ~~said the~~ client with a repository connected with the network based on contents of the message digests on the client and corresponding entries in a database of message digests stored on the repository; and verify that the contents of the repository match the contents of the client; and copy to the repository those contents of the client that did not match the contents of the repository.

21. (Currently Amended) The machine-readable medium of claim 20, wherein ~~said the~~ client stores the message digests ~~on the client after generating the message digests.~~

22. (Currently Amended) The machine-readable medium of claim 21, wherein ~~said the~~ client generates new message digests for all files on the client to be cached on the repository prior to data synchronization.

23. (Currently Amended) The machine-readable medium of claim 20, wherein ~~said~~
the files stored on the client comprise a subset of all files stored on the client.
24. (Cancelled)
25. (Currently Amended) The machine-readable medium of claim 20, wherein ~~said~~
the client generates a cryptographic hash for each file to be synchronized;
26. (Currently Amended) The machine-readable medium of claim 25, wherein ~~said~~
the cryptographic hash comprises 128 to 160 bits.
27. (Currently Amended) The machine-readable medium of claim 20, wherein ~~said~~
the client:
generates a first message digest for a file stored on the client;
reads a second message digest from the database of message digests from the
repository corresponding to the first message digest;
compares the first message digest to the second message digest;
determines whether contents of the client match contents of the repository;
copies files from the client to the repository if the files are not found on the
repository or do not match the files found on the repository; and
updates the database of message digests on the repository by copying the message
digest from the client to the database on the repository.

28. (Currently Amended) The machine-readable medium of claim 20, wherein ~~said~~
the client:
- generates a first cryptographic hash from a list of message digests for all files on
the client to be cached on the repository;
- generates a second cryptographic hash from the contents of the database of
message digests from the repository;
- compares the first and second cryptographic hash; and
- repeats client and repository synchronization if the first and second cryptographic
hashes do not match.